



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,924	07/08/2004	Eckhard Braun	2732-126	8945
6449	7590	11/18/2005		
ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005				
			EXAMINER WILLIAMS, KEVIN D	
			ART UNIT 2854	PAPER NUMBER

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/500,924

Applicant(s)

BRAUN ET AL.

Examiner

Kevin D. Williams

Art Unit

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 14-18 and 20-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-13 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/2/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Group 1, claims 1 and 5-13 in the reply filed on 7/18/2005 is acknowledged.

Claims 2-4, 14-18, and 20-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/18/2005. Applicant's traversal with respect to Group IV, claim 19 is found persuasive. Therefore, claim 19 is examined on the merits in this office action.

The traversal of Groups II, III, V, and VI (claims 2-4, 14-18, and 20-25) is on the ground(s) that these Groups share the special technical feature with the elected Group I. This is not found persuasive because the special technical features of Group II are directed to a mold, whereas the special technical features of Group I are directed to a features of a printing plate. The special technical features of Group III are directed to methods of forming a printing plate. The special technical features of Group V are directed to methods of forming a security document. The special technical features of Group VI are directed to features of a security document.

The requirement as stated above is deemed proper and is therefore made FINAL.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 5-13 and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the language "the embossed structures are of an order of magnitude of less than 100 microns." This language does not particularly point the dimension of the embossed structures that is being referred to. It is unclear whether the language refers to the height, length, width, or some other dimension of the embossed structures. It is also unclear whether the language refers to each individual embossed structure or a particular area of embossed structures.

Claim 5 fails to further limit its independent claim 1. The language "less than or equal to 100 microns" is broader than the language "less than 100 microns" as recited in claim 1.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte*

Art Unit: 2854

*Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 11 recites the broad recitation "less than 400 square millimeters", and the claim also recites "less than 100 square millimeters" which is the narrower statement of the range/limitation.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5-10, 12, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Mayer (DE 19845436).

Mayer teaches a steel intaglio printing plate 1 comprising a printing plate surface 2 having at least one first area 7a with steel intaglio structures and at least one second area 7b with embossed structures, wherein the embossed structures are of an order of magnitude of less than 100 microns (Fig. 1;  $t_b$ ) and wherein the parts of the embossed structures closest to the printing plate surface are located 20 microns to 100 microns ( $t_b$ ; claim 6) below the printing plate surface, the embossed structures are of an order of magnitude of  $\leq 100$  microns (Fig. 1;  $t_b$ ), the embossed structures (11) are of an order of magnitude in the range of 5 to 100 microns (Fig. 1;  $t_b$ ), the embossed structures are so formed that a diffractive relief structure can be embossed therewith, the embossed structures are of an order of magnitude of less than 1 micron (Fig. 1;  $t_b$ ), the parts of the embossed structures closest to the printing plate surface 2 or molding plane are located

Art Unit: 2854

at least 40 microns ( $t_b$ ; claim 6) away from the printing plate surface 2 or molding plane, the parts of the embossed structures closest to the printing plate surface (9) or molding plane are located at most 60 microns ( $t_b$ ; claim 6) away from the printing plate surface or molding plane, and a plurality of areas with embossed structures constitute an embossed structure grid.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayer in view of Mayer (WO 00/20217).

Mayer teaches the claimed invention except for the area of the embossed structures having an area size of less than 400 square millimeters, preferably less than 100 square millimeters, and the embossed structures being separated from the steel intaglio structures or from another area with embossed structures by a separation bar extending as far as the printing plate surface or molding plane and having a width of at least 0.5 millimeters.

Mayer (WO 00/20217) teaches a printing plate having embossed structures having an area size of less than 400 square millimeters, preferably less than 100 square millimeters (page 6, lines 12-16), and the embossed structures being separated from

Art Unit: 2854

the steel intaglio structures or from another area with embossed structures by a separation bar (d; page 9, lines 15-20) extending as far as the printing plate surface or molding plane and having a width of at least 0.5 millimeters.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mayer to have the plate arrangement as taught by Mayer (WO 00/20217), in order to print a quality security features on a medium.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (571) 272-2172. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Application/Control Number: 10/500,924


Page 7

Art Unit: 2854

you have questions on access to the Private PAIR system, contact the Electronic  
Business Center (EBC) at 866-217-9197 (toll-free).

KDW

November 17, 2005



**ANDREW H. HIRSHFELD**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2800**